

# ***Prop Cockpit Trainer***<sup>TM</sup>

## **USER MANUAL**

**(MEP2.520-26APR2010)**

**Please read this manual before operating your  
units and keep it for future reference**



**All stated here is subject to change without advanced notice for improvement.**

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## VRinsight *Prop Cockpit Trainer*



The ***Prop Cockpit Trainer*** of VRinsight is a realistic propeller type cockpit training device with full control and screen system for instrument flight. Modeled single engine aviation, aluminum yoke, Engine start Magnetos (5-positions), Landing Gear, 3 Axis lever, Flap switch, Radio panel & GPS are closely reproduced to experience real instrument flight synchronized with Microsoft's Flight Simulator.

The ***Prop Cockpit Trainer*** is the one of the most affordable training device for student pilots, on-line pilots to fly at anytime and anywhere.

- **SerialFP2** software supports all functions to ***Prop Cockpit Trainer***.
- One free USB port & one free DVI/VGA video port required.
- Microsoft Flight Simulator 2004 & Microsoft Flight Simulator X compatible.

**BEFORE USE** : Thanks for purchasing VRi's ***Prop Cockpit Trainer*** .  
Before operating your units, please read through this manual and keep it for future reference. For any further question, visit [www.wilcopub.com](http://www.wilcopub.com) or contact us below:

Fax : +32-2-33107 51

E-mail (Support team) : [info@wilcopub.com](mailto:info@wilcopub.com)

**NOTE** : This manual could be redistributed unless you modify the contents.  
This manual has been written out on a ***Prop Cockpit Trainer*** basis.

All software (& software versions) stated here (MEP2.520-26APR2010) is subject  
To change without advanced notice for improvement.

If you want to download the latest driver version for panel & application  
programs, visit [www.vrinsight.com](http://www.vrinsight.com)

### ***Prop Cockpit Trainer (Prop Cockpit Trainer with three monitors)***



Prop Cockpit Trainer with three monitors  
(Monitors are not included in the package)

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## **Features**

- Same functionality and externality with real Propel type aircraft cockpit.
- Gauges on the panel;
  - SPEED indicator
  - ATTITUDE indicator with position bar setting rotary knob
  - ALTIMETER with BARO setting rotary knob
  - TURN COORDINATOR
  - HEADING indicator with heading bug and gyro rotary knob
  - VERTICAL SPEED indicator
  - VOR1 indicator with OBS rotary knob
  - VOR2 indicator with OBS rotary knob
  - ADF indicator with HDG rotary knob
  - FUEL gauge
  - Manifold pressure gauge
  - TACHOMETER
  - CLOCK
  - GPS with push buttons and rotary knob (GPS500 model)
- Radio panel
  - Red color 7-segments and tact switches
  - Luminous tact switched
  - Integrated unit with all radio stack units ; COM 1/2, NAV 1/2, ADF, DME, TRANSPONDER, AUTO-PILOT unit
- Solid cast aluminum powder coated yoke
- Switch panel
  - Engine start magnetos switch : 5 positions
  - Battery switches
  - Avionics master switch
  - Fuel boost pump switches
  - Light switches : BCN, LAND, TAXI, NAV, STROBE
  - Pitot heat switch
  - Pitch / Trim wheel with status indicator FNDs.
  - 3 Axis lever : Throttle, Fuel mixture, Propeller pitch
- Flap lever
- Fuel tank selector
- Landing gear switch with position indicator lights
- Full metal & Aluminum cases

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- Metal feet included
  - One year warranty

### **Technical specifications**

- USB interface type to computer
- External power requirement : 110V / 220V free voltage  
**Outlet for TFT LCD monitor is European standard.**
- Video port requirement : One DVI or VGA video port
- 34kg (without feet) / 36 kg (with feet)
- L : 73cm W : 75cm H : 46cm (without feet) / 103cm (with feet)

### **Compatibility software**

- Flight Simulator 2004 / FSX by Microsoft

### **Operating software**

- SerialFP2

## **SerialFP2 Installation**

In the **Prop Cockpit Trainer**, one “Install DVD” is included. When you insert it in DVD driver of your computer, “*VRinsight HTML*” document will be shown. Then click “SerialFP2” (operating software) and install it at a proper folder. “SerialFP2” is the main operating software of VRinsight used for all VRinsight flight panels.

SerialFP2 software supports all functions of **Prop Cockpit Trainer** and completely interfaced with MSFS9 and MSFSX enables full simulation with simple connection your computer through USB.

**Be sure that when installing SerialFP2, “Install USB-Serial Driver” must be checked.**

After installation, you can find “SerialFP2” in “All programs” of “Start menu”.

## **USB Connection**

The connection between **Prop Cockpit Trainer** and your computer is made using a USB cable that plugs into one USB port on your computer. **If you want to use a USB hub, be sure that the USB hub is USB 2.0 compliant. Otherwise it may cause a malfunction.**

When you connect **Prop Cockpit Trainer** to your computer at first, your computer will detect it and will describe the process step by step.

## **Power Connection**

Power supplying of **Prop Cockpit Trainer** is done by 110V / 220V free power cable.

## **Video Connection**

The connection between **Prop Cockpit Trainer** and your computer is made using DVI or VGA cable.

## **Run “SerialFP2”**

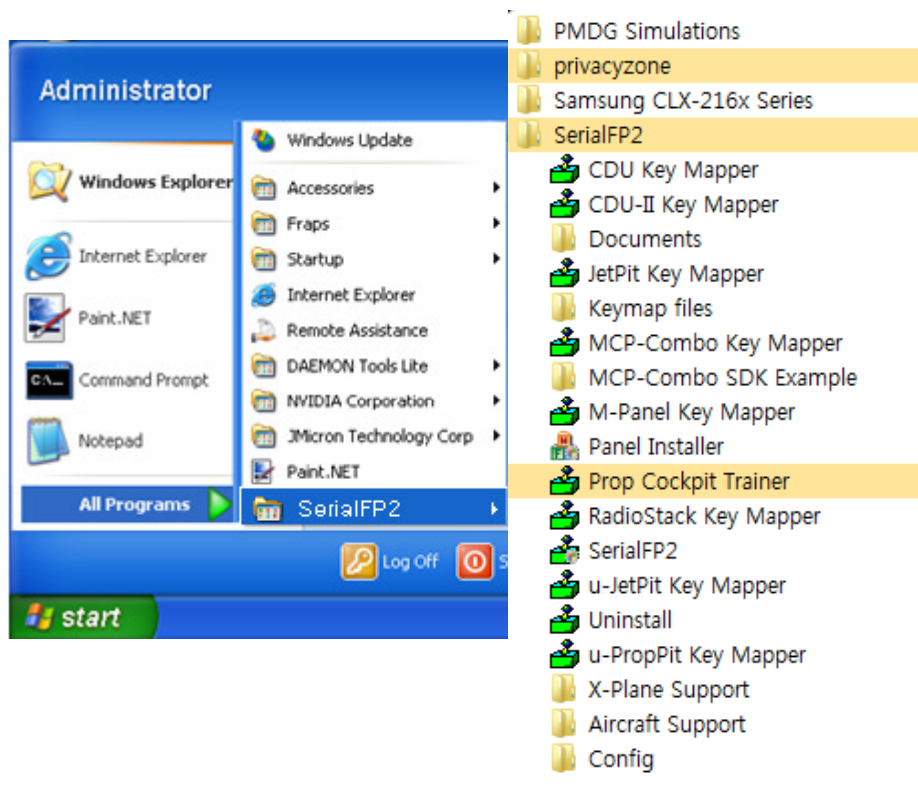
When you confirm all setup processes done; “SerialFP2” installation, “USB connection”, “Video Connection” and “Power connection”, you are ready to operate **Prop Cockpit Trainer**.

## **Download & install “FSUIPC”**

Refer to “Download & install FSUIPC” at “Download” part of [www.vrinsight.com](http://www.vrinsight.com)

FS 9 requires FSUIPC v3.80 or later. FSX requires FSUIPC v 4.26 or later

Double click shortcut of “**Prop Cockpit Trainer**” or find it in “All programs” of “Start menu. If everything is done properly, below window will be shown.



## Controls & Displays for each part



Cockpit panel with GPS



Radio panel



Yoke

## Switch panel



Magnetos



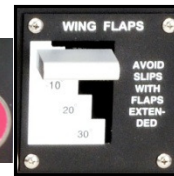
Battery, Avionics & light switches



Pitch / Trim wheel



3 Axis lever



Flap lever



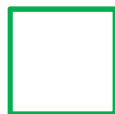
Landing gear



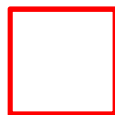
**Cockpit panel** : Air speed indicator, Turn coordinator, RPM indicator, Clock, Fuel flow indicator, VOR1, VOR2, HDG, ALT, Altitude indicator and Heading indicator



**Radio panel** : COM 1/2, NAV 1/2, ADF, DME, Transponder, Auto-pilot unit



**Yoke** : Solid cast aluminum powder coated yoke



**Switch panel** : Magnetos, Battery Avionics & light switches, Pitch / Trim wheel, 3 Axis lever, Flap lever, Landing gear

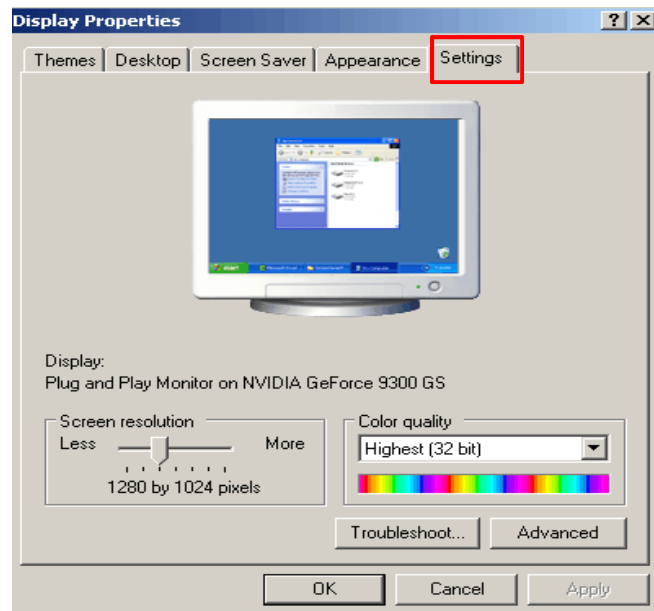
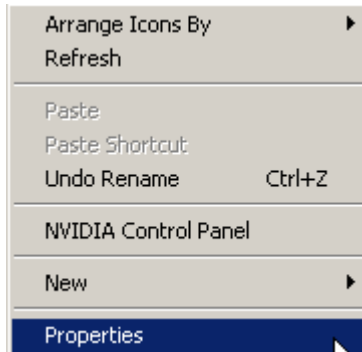


[illegible]

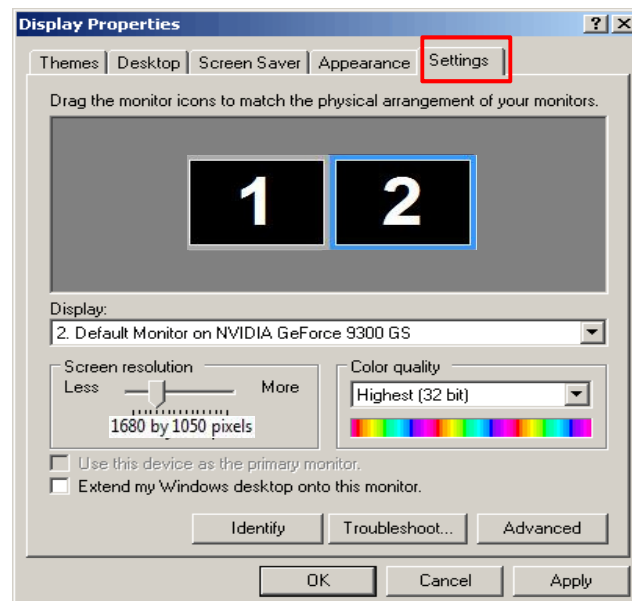
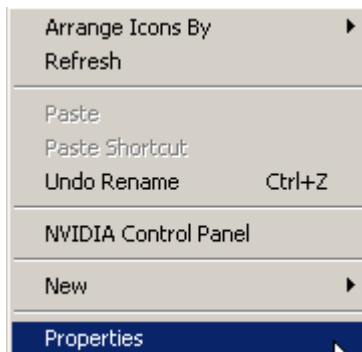


## Monitor setting

1. Check the current display properties in order that another sub monitor is connected or not. (See “Settings”)



2. Connect video cable of **Prop Cockpit Trainer** to your computer.
3. Connect AC/DC adaptor to your **Prop Cockpit Trainer**.
4. Check the display property in order that **Prop Cockpit Trainer** monitor is detected or not.



\* If the **Prop Cockpit Trainer** monitor (=Monitor 2) isn't detected, check the connection of video cable & AC/DC adaptor.

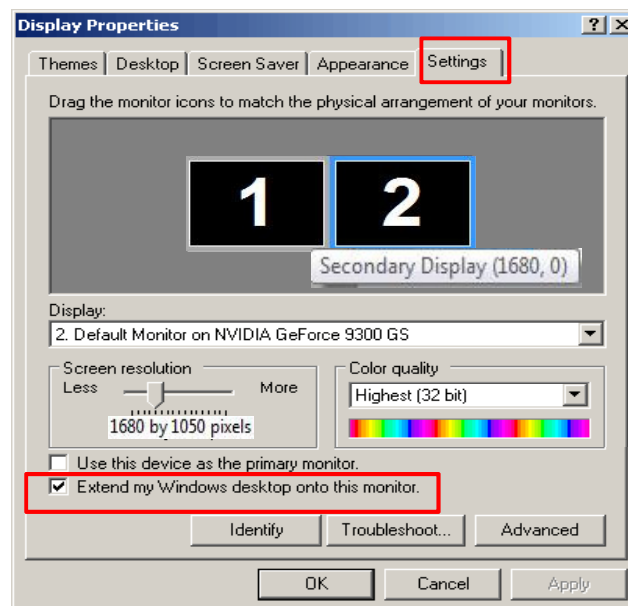
\* If your OS is VISTA, please restart your computer.

5. When the **Prop Cockpit Trainer** monitor is recognized, click monitor 2 (= **Prop Cockpit Trainer** monitor).

6. Adjust the resolution for **Prop Cockpit Trainer** monitor.  
(Recommended resolution is **1680 \* 1050**).

7. Check the position of the monitor 2.

8. Check "Extend my Windows desktop onto this monitor".



\* If **Prop Cockpit Trainer** monitor doesn't illuminate, restart your computer.

9. Click "Apply" and click "OK"

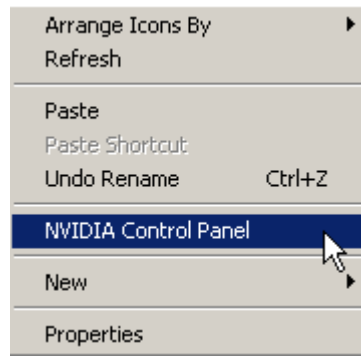
10. If everything is done properly, **Prop Cockpit Trainer** will be power on.

\* If **Prop Cockpit Trainer** doesn't power on, restart your computer. And press "Power reset" button back on the **Prop Cockpit Trainer** .

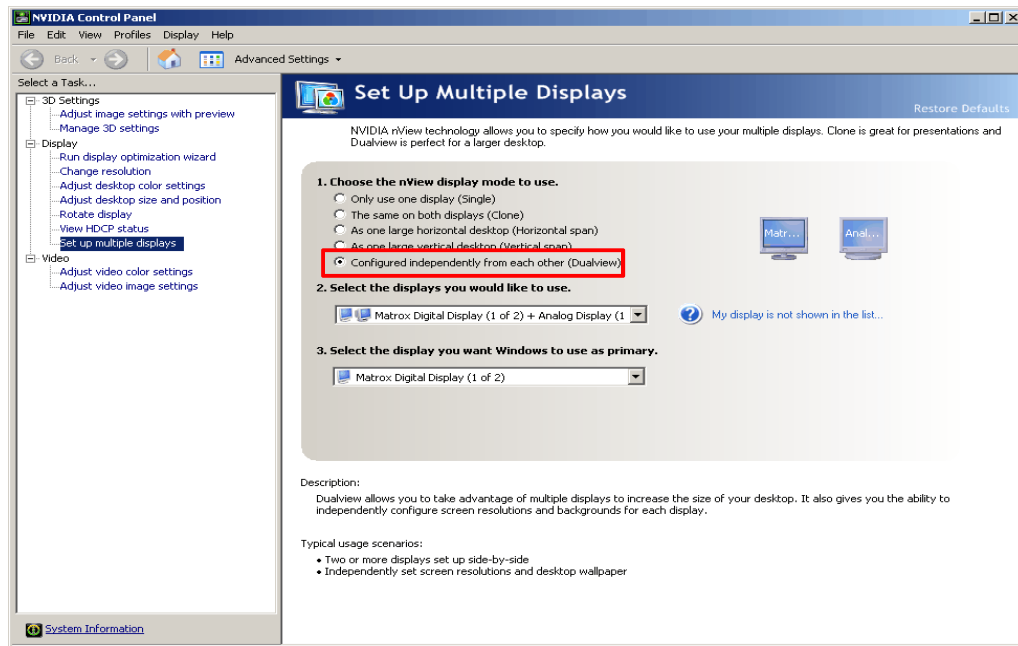
## 11. Multiple display

### 11-A. NVIDIA

#### 11-A-1. Launch "NVIDIA Control Panel".



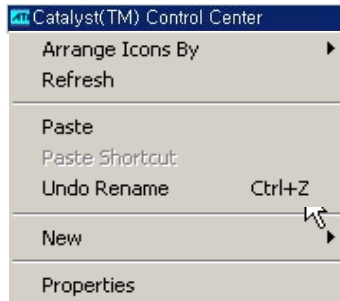
11-A-2. Go to "Set up multiple displays and check "Configured independently from each other (Dualview)". Then the monitor of *Prop Cockpit Trainer* will independently display your "Desktop" view.



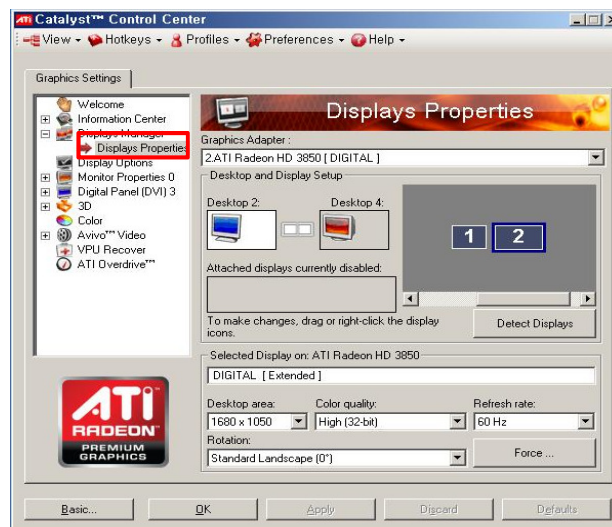
## 11-B. ATI

10-B-1. Launch "Catalyst(TM) Control Center".

The monitor of **Prop Cockpit Trainer** will automatically display your "Desktop" view.



11-B-2. Go to "Displays Properties" and select monitor 2.

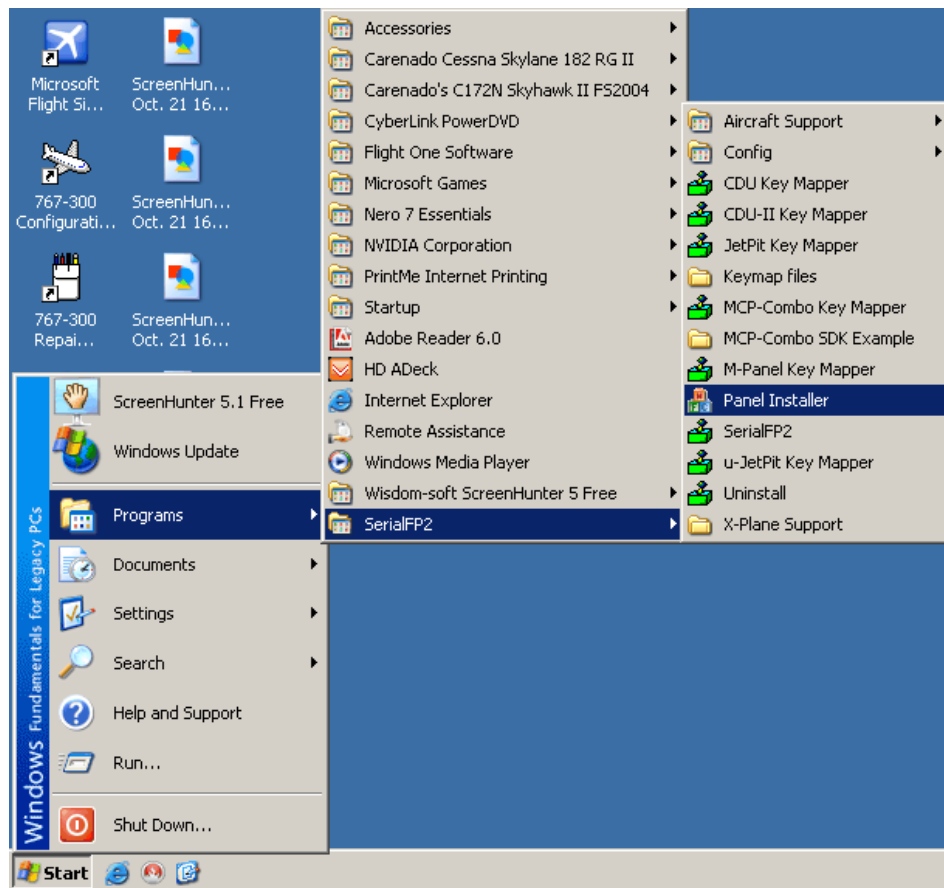


## Panel installer launch

: Panel installer will copy & paste all necessary panel data to work automatically. **Be sure “Panel Installer” should run before running SerialFP2.**

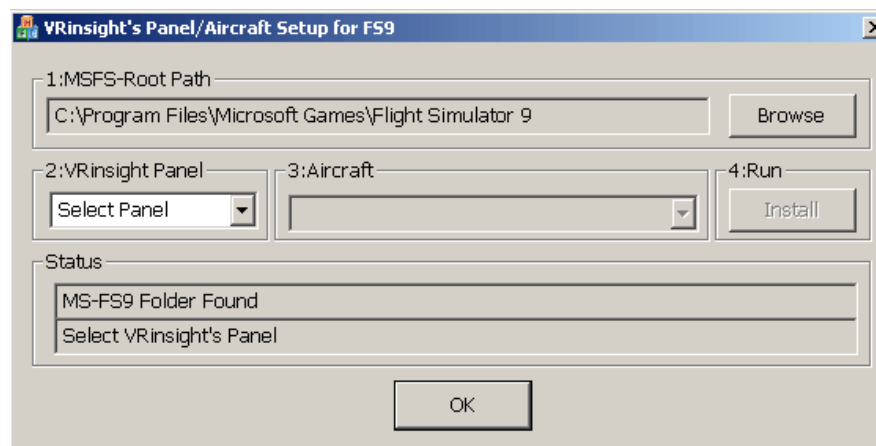
**\* Once the panel is installed, aircraft configuration is kept.**

After “SerialFP2” installation, you can find “Panel Installer”.

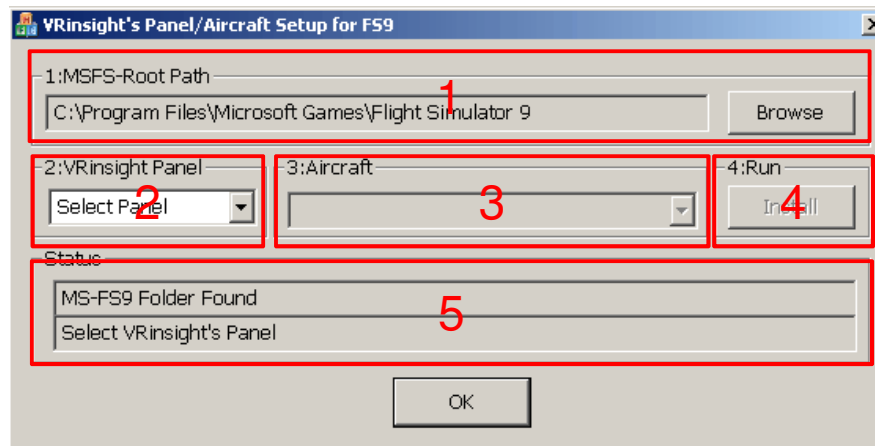


## How to use “Panel Installer”.

### 1. Run “Panel Installer” first

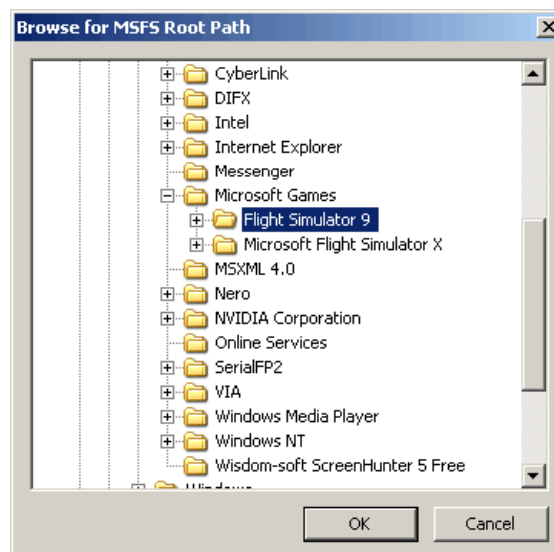




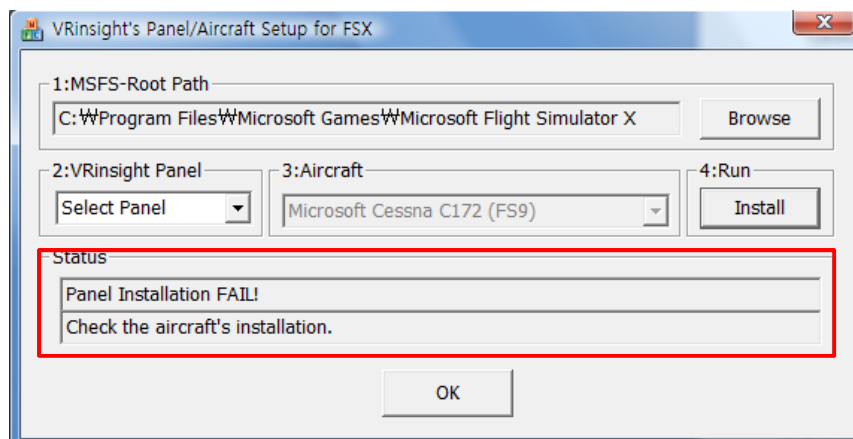


**1. MSFS-Root Path :** Browse the path where “Flight Simulator 9” or “Microsoft Flight Simulator X” is installed.

\* If “Flight Simulator 9” or “Microsoft Flight Simulator X” is installed other “Drive” or “Directory”, find the path and click “OK”.

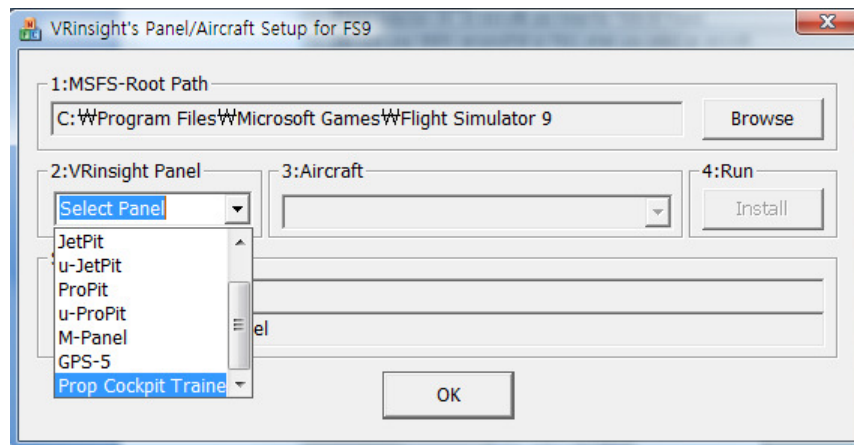


\* if you select a wrong path, “Status” window displays error message.

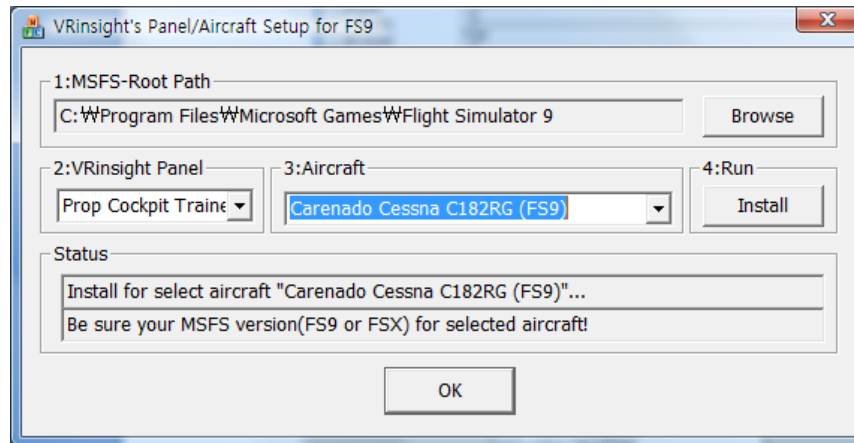




2. **VRinsight panel** : Drop down and select your panel.

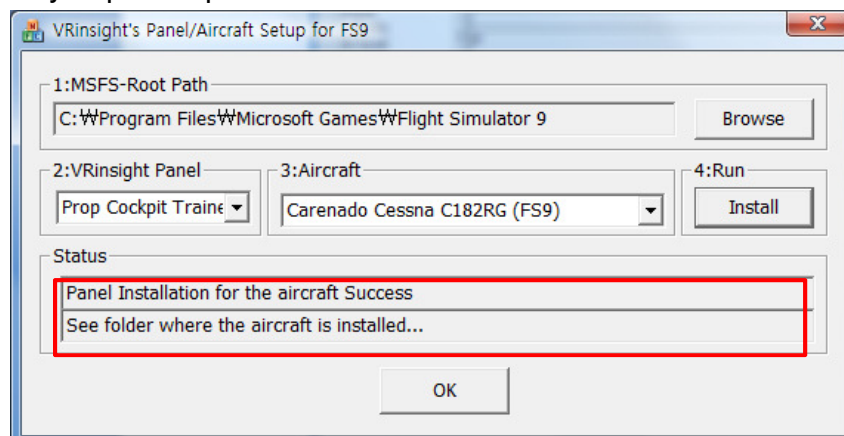


3. **Aircraft** : Drop down and select your aircraft.



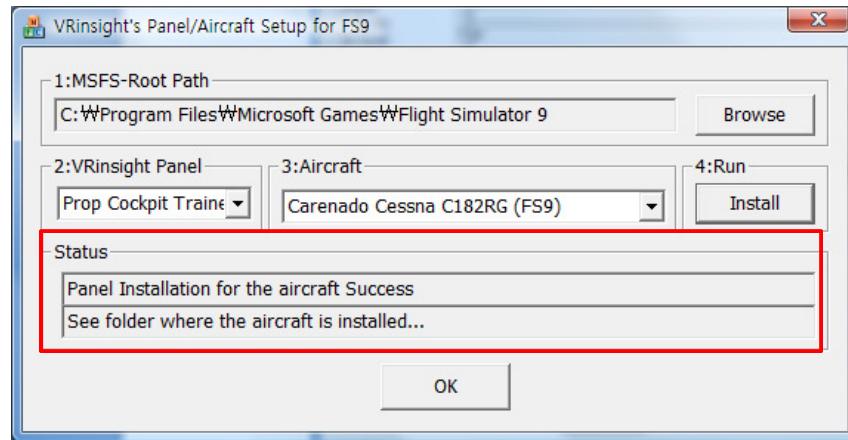
4. **Run** : Copy & paste all necessary panel data to work **Prop Cockpit Trainer** automatically.

\* If you select an aircraft for FS9 and the "MSFS-Root Path" is for FSX, "Status" window displays error message and all necessary panel data will not be automatically copied & pasted. And vice versa.



**5. Status :** Inform current status.

\* If everything is done properly, you will get below message



## Preparing *Prop Cockpit Trainer* before Flight

### Step 1 : Initial check up

Before flight with *Prop Cockpit Trainer*, please check the followings are done

- A. Install of SerialFP2.
  - \* Check that “Install USB-Serial Driver” is checked or not.
- B. Confirm that proper version of FSUIPC is installed or not  
(FSUIPC v3.80 or later for FS9 / FSUIPC v4.26 or later for FSX)
- C. Confirm the USB connection.
  - \* Check that the USB port of your computer is dead or not
  - \* Check that if you use USB hub, be sure that the USB hub is USB 2.0 compliant.
- D. Confirm power.
- E. Confirm the DVI or VGA connection.
- F. Confirm the monitor setting. (See page no. 10)
- G. Confirm that “Panel Installer” is executed or not.

### Step 2 : Run flight simulator (MSFS9 / MSFSX)

- A. Run flight simulator (MSFS9 / MSFSX).
- B. Select Aircraft

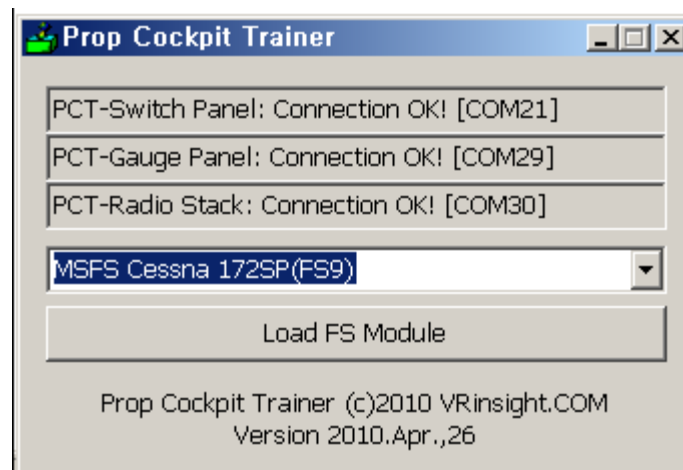


Initial screen of MSFS will be shown like pic 1. Then undock it.



**Pic 1**

**Step 3.** Run Prop Cockpit Trainer. Then Prop Cockpit Trainer will automatically detect three parts : Switch panel, Gauge panel & Radio Stack. Select your aircraft and click “Load FS Module”.





**Step 4.** Confirm all gauges are move to *Prop Cockpit Trainer* like pic 3.



**Pic 3**

**Step 5.** If all gauges are still in MSFS9 / MSFSX window like pic 4, it means



**Pic 4**

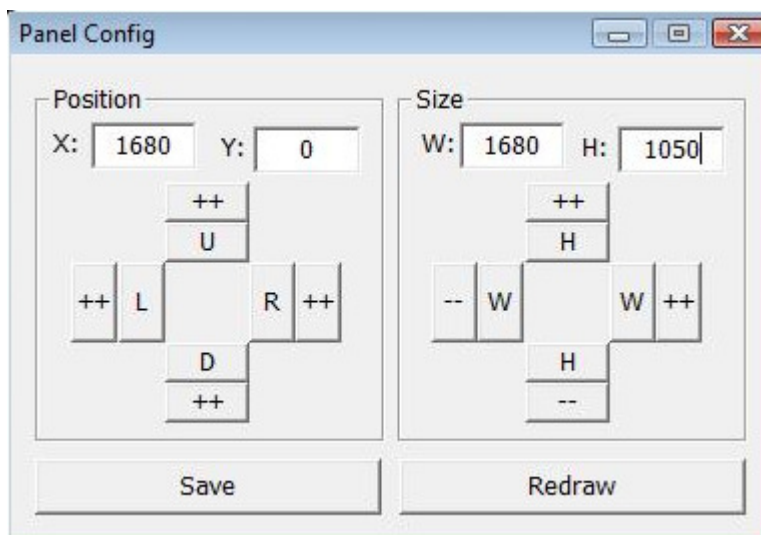
that you have to re-position the gauges display.

You can re-position the gauges display by “Panel Config” window. Find the minimized “Panel Config” window at the bottom of your monitor like pic 5.



**Pic 5**

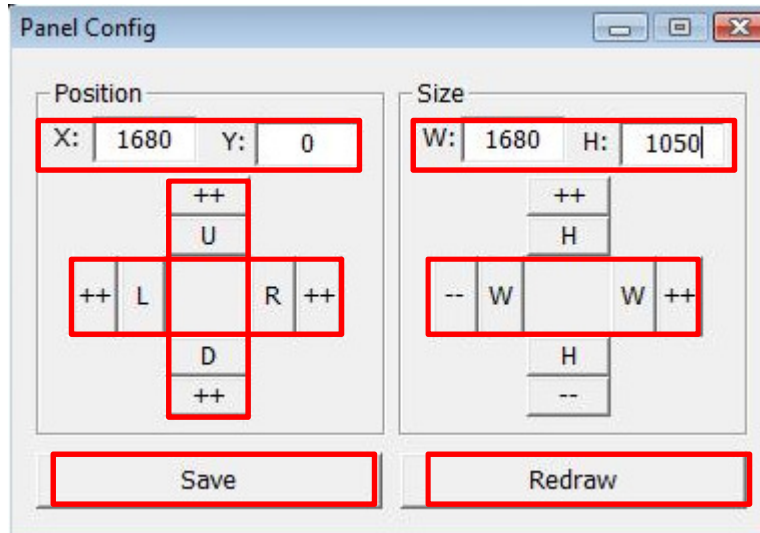
**Step 7.** Input the X & Y position of sub monitor for *Prop Cockpit Trainer* and press “Redraw”.



\* For instance,  
If X & Y position is  
same as page 8,  
Put X=1680, Y=0.

If X & Y size is same as  
page 9, Put W=1680,  
Y=1050.

**Step 8.** Confirm the gauges display has been move to **Prop Cockpit Trainer** . Then press “Save” for future purpose. With “Panel Config” window, you can adjust position and size of the gauges display. See how to control them.



<b>X, Y</b>	Current position of gauges display window
<b>++ U</b>	Moves gauges display window to up
<b>++ D</b>	Moves gauges display window to down
<b>++ L</b>	Moves gauges display window to left
<b>++ R</b>	Moves gauges display window to right
<b>W, H</b>	Current size of gauges display window
<b>++ H</b>	Expands in up & lower gauges shape
<b>-- H</b>	Reduces in up & lower gauges shape
<b>++ W</b>	Expands in left & right gauges shape
<b>-- W</b>	Reduces in left & right gauges shape
<b>Redraw</b>	Execute current settings
<b>Save</b>	Save all settings.